

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/783,117	02/15/2001	Thomas Paul Nolting	50107-480	2216	
75	590 06/03/2002				
Leonard C. Suchyta c/o Christian R. Andersen Verizon Services Group, 600 Hidden Ridge Drive			EXAMINER		
			NGUYEN, DUC MINH		
Mail Code: HQE03H01 Iriving, TX 75038		ART UNIT	PAPER NUMBER		
			2643		
			DATE MAILED: 06/03/2002	DATE MAILED: 06/03/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

1/2

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)				
<u>.</u>	09/783,117	NOLTING, THOMAS PAUL				
Office Action Summary	Examiner	Art Unit				
•	Duc Nguyen	2643				
The MAILING DATE of this communication app	ears on the cover sheet with the c	correspondence address				
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY	/ IS SET TO EXPIRE 3 MONTH	(S) FROM				
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
, <u> </u>	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4)⊠ Claim(s) <u>1-17 and 23-43</u> is/are pending in the	application.					
,,	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-17, 23-43</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	•					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domesting 	, ,					
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

Application/Control Number: 09/783,117

Art Unit: 2643

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-17, 23-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman et al (5,592,530) in view of Malloy et al (5,905,985).

Consider claim 1. Brockman et al teach a system and method for monitoring the operation of the switching nodes. Brockman et al disclosed that the system monitoring the signaling between two different devices in the network, capture and correlate the signaling information. The system correlate the messages pertaining a particular call or transaction to a single data record. The call transaction records (i.e., flat files) are compiled and direct to the system analyzer in order to evaluate the system performance (see col. 2 lines 7-57). The Call Detail Record (CDR) generation create data records that can be sent to an external system explaining what occurred in the call. CDRs (i.e., flat files) are transmitted to external systems which analyze them for fraud detection, billing, and service assurance applications (see col. 16 lines 30-41). Brockman further teaches "every SS7 message contains a routing label consisting of a destination point code (DPC), origination point code (OPC), and the signaling link selection

Art Unit: 2643

code." (col. 6, ln. 13-33). Brockman also teaches monitor 1 and 2 monitor multiple calling numbers as well as called numbers (there could be many calls going simultaneously between SSP1 and SSP2; col. 9, ln. 5-14). Brockman further teaches "call tracing is applicable only to a small percentage of calls so as not to substantially increase the bandwidth requirements of the communication bus 145 between monitor 1 and 2." (col. 16, ln. 23-29). Based on the messages pertaining the routing label and the ability of monitor 1 and 2 to monitor and trace multiple calling numbers as well as called numbers, it is inherent that Brockman system can create relational files relating to multiple transactions for multiple called numbers based upon the collected messages.

Brockman does not clearly teach performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof.

Malloy teaches performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof (see the abstract; see figure 1; column 2 line 44 to column 3 line 2; column 3 lines 44-61; column 4 lines 50-60; column 5 lines 3-20; column 5 lines 53-64; column 6 lines 10-37; column 10 line 35 to column 11 line 34; column 11 line 55 to column 12 line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Malloy into the teachings of Brockman in order to

Art Unit: 2643

provide a multi-user client/server system which offers consistently rapid response to database access, regardless of database size and complexity.

Consider claims 2-13. Brockman et al teach that the system track the number of calls are being dropped, the number of call completed, the call time of the call, the end time of the call, calling number, switching nodes involved, and other data used in billing system (see col. 16 lines 1-41). Brockman et al also teach that the system utilizes timeout conditions to define the maximum duration of any phone call in order to detect certain errors (see col. 13 lines 40+). This reads on applicant method wherein said transaction comprise completed dialed telecommunication sessions between a calling terminal and a called terminal. The incomplete dialed attempts between the calling terminal and the called terminal. This also reads on applicant method including the step of providing a report of calls dialed to a designated terminal in a designated time period and wherein said report includes data relating to the time of connection of completed calls. This further reads on applicant method wherein said report includes data relating to the number of incomplete calls within a time frame; information regarding the routing of said calls; information as to whether said calls were routed through a tandem switching system; information identifying the originating switching systems, the tandem switching systems, and the terminating systems for said calls; information as to whether said calls were routed through switching facility without routing through the tandem switch; information as to whether said calls were routed through the switch in said tandem switching installation.

Art Unit: 2643

Consider claims 14 and 15. Brockman et al teach that in the telephone, all SS7 messages pertaining to a particular call traverse between SSP1 and SSP2 through STP1, all of SS7 messages are sent through the A-link of the STP1 (see col. 11 lines 30-67). This reads on applicant method wherein said common channel signaling system is an SS7 system and said monitoring occurs on an A links in that system. This also reads on applicant method wherein said monitoring occurs on A links to the originating switching systems and to the terminating switching systems.

Consider claims 16 and 17, as discussed above, Brockman et al teach that an SS7 network traditionally has three basic types of network nodes elements. One of them is the SSP, which may be a central office switch, a tandem switch or an end office switch (see col. 1 lines 33-45).

Brockman et al also teach that every SS7 message contains a routing label consisting of a Destination Point Code, Originating Point Code, and the signaling link selection code (see col. 6 lines 13-33). This reads on applicant method wherein said monitoring also occurs on A links to a tandem switching system connected between the originating and terminating switching systems. This also reads on applicant method including the step of providing a report of calls dialed to a designated terminal in a designated time period and including identification of the originating switching systems.

Consider claims 23 and 29, Brockman et al teach a system and method for monitoring the operation of the switching nodes. Brockman et al teach the plurality of links connected between the plurality of SSP's and a pair of STP's (see Fig. 1). Brockman et al disclosed that the system

Art Unit: 2643

monitoring the signaling between two different devices in the network, capture and correlate the signaling information. The system correlate the messages pertaining a particular call or transaction to a single data record. The call transaction records are compiled and direct to the system analyzer in order to evaluate the system performance (see col. 2 lines 7-57). The Call Detail Record (CDR) generation create a data record that can be sent to an external system explaining what occurred in the call. CDR are transmitted to external systems which analyze them for fraud detection, billing, and service assurance applications (see col. 16 lines 30-41). This reads on applicant method comprising monitoring the signaling in said A links and selecting the A link signaling relating to call set up; collating the selected signaling by call; processing the collated signaling to create relational files relating to multiple call; subjecting the relational files to on line analytical processing to provide a multidimensional database to consolidate and summarize ongoing call attempts and completions and provide reports thereof. Brockman further teaches "every SS7 message contains a routing label consisting of a destination point code (DPC), origination point code (OPC), and the signaling link selection code." (col. 6, ln. 13-33). Brockman also teaches monitor 1 and 2 monitor multiple calling numbers as well as called numbers (there could be many calls going simultaneously between SSP1 and SSP2; col. 9, ln. 5-14). Brockman further teaches "call tracing is applicable only to a small percentage of calls so as not to substantially increase the bandwidth requirements of the communication bus 145 between monitor 1 and 2." (col. 16, ln. 23-29). Based on the messages pertaining the routing label and the ability of monitor 1 and 2 to monitor and trace multiple calling numbers as well as called numbers, it is inherent that Brockman

Art Unit: 2643

system can create relational files relating to multiple transactions for multiple called numbers based upon the collected messages.

Brockman does not clearly teach performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof.

Malloy teaches performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof (see the abstract; see figure 1; column 2 line 44 to column 3 line 2; column 3 lines 44-61; column 4 lines 50-60; column 5 lines 3-20; column 5 lines 53-64; column 6 lines 10-37; column 10 line 35 to column 11 line 34; column 11 line 55 to column 12 line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Malloy into the teachings of Brockman in order to provide a multi-user client/server system which offers consistently rapid response to database access, regardless of database size and complexity.

Consider claims 24-28 and 30-31, Brockman et al teach that the system track the number of calls are being dropped, the number of call completed, the call time of the call, the end time of the call, calling number, **switching nodes involved**, and other data used in billing system (see col. 16 lines 1-41). Brockman et al also teach that the system utilizes timeout conditions to define the maximum duration of any phone call in order to detect certain errors (see col. 13 lines 40+). This reads on applicant method including the step of providing a report of calls dialed to a designated

Art Unit: 2643

terminal in a designated time period and wherein said report includes data relating to the time of connection of completed calls. This also reads on applicant method wherein said report includes data relating to the number of incomplete calls within a time frame; information regarding the routing of said calls; and information as to whether said calls were routed through a tandem switching system. This reads on applicant method including the steps of providing reports of the identity of the end office switching systems from which the calls were routed to said tandem switching system and steps of providing reports of the identity of the end office switching systems to which the calls were routed from said tandem switching system.

Consider claim 32, Brockman et al teach a system and method for monitoring the operation of the switching nodes. Brockman et al teach the plurality of links connected between the plurality of SSP's (e.g. end office switching systems, tandem switching systems, etc.) and a pair of STP's (see Fig.1). Brockman et al disclosed that the system monitoring the signaling between two different devices in the network, capture and correlate the signaling information. The system correlate the messages pertaining a particular call or transaction to a single data record. The call transaction records are compiled and direct to the system analyzer in order to evaluate the system performance (see col. 2 lines 7-57). The Call Detail Record (CDR) generation create a data record that can be sent to an external system explaining what occurred in the call. CDR are transmitted to external systems which analyze them for fraud detection, billing, and service assurance applications (see col. 16 lines 30-41). This reads on applicant system comprising monitors interfacing to the signaling in said A links and selecting the A link signaling relating to

Art Unit: 2643

call set up between end office switching system through a tandem switching system; processing means collating said selected signaling by call based at least in part of A link signaling to and from said tandem switching system; processing means processing said collated signaling to create relational files relating to multiple calls; and on line analytical processing means providing a multidimensional database wherein said rational flat files are processed to consolidate and summarize successful and unsuccessful attempts to route calls through said tandem switching system and provide reports thereof. Brockman further teaches "every SS7 message contains a routing label consisting of a destination point code (DPC), origination point code (OPC), and the signaling link selection code." (col. 6, ln. 13-33). Brockman also teaches monitor 1 and 2 monitor multiple calling numbers as well as called numbers (there could be many calls going simultaneously between SSP1 and SSP2; col. 9, ln. 5-14). Brockman further teaches "call tracing is applicable only to a small percentage of calls so as not to substantially increase the bandwidth requirements of the communication bus 145 between monitor 1 and 2." (col. 16, ln. 23-29). Based on the messages pertaining the routing label and the ability of monitor 1 and 2 to monitor and trace multiple calling numbers as well as called numbers, it is inherent that Brockman system can create relational files relating to multiple transactions for multiple called numbers based upon the collected messages.

Brockman does not clearly teach performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof.

Art Unit: 2643

Malloy teaches performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof (see the abstract; see figure 1; column 2 line 44 to column 3 line 2; column 3 lines 44-61; column 4 lines 50-60; column 5 lines 3-20; column 5 lines 53-64; column 6 lines 10-37; column 10 line 35 to column 11 line 34; column 11 line 55 to column 12 line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Malloy into the teachings of Brockman in order to provide a multi-user client/server system which offers consistently rapid response to database access, regardless of database size and complexity.

Consider claims 33-35, Brockman et al teach the internal architecture of the monitors where the monitors includes processors where the SS7 messages were captured, correlated and processed (see col. 14 lines 23+ and Fig. 7). This reads on applicant system wherein said online analytical processing means provides a data warehouse including multiple related tables which said online analytical processor drills into to retrieve additional information. The also reads on applicant system wherein said online analytical processor is object oriented. This reads on applicant system wherein at least part of said information is obtained from switching system is said switched telecommunication network.

Consider claim 36, Brockman et al teach the system and method of monitoring messages and generate call detail records in the SS7 network. Brockman et al failed to disclosed of the automatic messages accounting (AMA) equipment used to provide information to the monitoring

Art Unit: 2643

system. However, the examiner take official notice that it is well known in the art to used the AMA in a switched network. Therefore it would have been obvious to one of the ordinary skill in the art at the time the invention was made to include the AMA system in the switched network in order for billing of service and reporting the event that occurred.

Consider claim 37, Brockman et al teach the system and method of monitoring messages and generate call detail records in the SS7 network. Brockman et al teach the internal architecture of the monitors where the monitors includes processors where the SS7 messages were captured, correlated and processed (see col. 14 lines 23+ and Fig. 7). Brockman et al also disclosed that all intranetwork messages can be done using only the network cluster and cluster member field (see col. 6 lines 13+). This reads on applicant system wherein at least part of the information relates to the calls completes through intra switching system connections.

Consider claims 38 and 39, Brockman et al teach a system and method for monitoring the operation of the switching nodes. Brockman et al teach the plurality of links connected between the plurality of SSP's and a pair of STP's (see Fig.1). Brockman et al disclosed that the system monitoring the signaling between two different devices in the network, capture and correlate the signaling information. The system correlate the messages pertaining a particular call or transaction to a single data record. The call transaction records are compiled and direct to the system analyzer in order to evaluate the system performance (see col. 2 lines 7-57). The Call Detail Record (CDR) generation create a data record that can be sent to an external system explaining what occurred in the call. CDR are transmitted to external systems which analyze them for fraud detection, billing,

Art Unit: 2643

and service assurance applications (see col. 16 lines 30-41). This reads on applicant method comprising monitoring the signaling between the end office switching systems and the signal transfer points and selecting the signaling relating to transactions and collating the selected signaling by transaction. This also reads on applicant method wherein processing is performed at least in part by online processing means providing a multidimensional database, wherein relation data is processed to consolidate and summarize successful and unsuccessful attempts to route calls to completion. Brockman further teaches "every SS7 message contains a routing label consisting of a destination point code (DPC), origination point code (OPC), and the signaling link selection code." (col. 6, ln. 13-33). Brockman also teaches monitor 1 and 2 monitor multiple calling numbers as well as called numbers (there could be many calls going simultaneously between SSP1 and SSP2; col. 9, ln. 5-14). Brockman further teaches "call tracing is applicable only to a small percentage of calls so as not to substantially increase the bandwidth requirements of the communication bus 145 between monitor 1 and 2." (col. 16, ln. 23-29). Based on the messages pertaining the routing label and the ability of monitor 1 and 2 to monitor and trace multiple calling numbers as well as called numbers, it is inherent that Brockman system can create relational files relating to multiple transactions for multiple called numbers based upon the collected messages.

Brockman et al failed to disclosed of the automatic messages accounting (AMA) used to provide information to the monitoring system. However, the examiner take official notice that it is well known in the art to used the AMA in a switched network. This reads on applicant method

Art Unit: 2643

comprising collating automatic message accounting equipment output recording call detail and processing the collated common channel signaling and automatic message accounting output to provide a multidimensional database to consolidate and summarize ongoing transactions and provide reports thereof.

Therefore it would have been obvious to one of the ordinary skill in the art at the time the invention was made to include the AMA system in the switched network in order for billing of service and reporting the event that occurred.

Brockman does not clearly teach performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof.

Malloy teaches performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof (see the abstract; see figure 1; column 2 line 44 to column 3 line 2; column 3 lines 44-61; column 4 lines 50-60; column 5 lines 3-20; column 5 lines 53-64; column 6 lines 10-37; column 10 line 35 to column 11 line 34; column 11 line 55 to column 12 line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Malloy into the teachings of Brockman in order to provide a multi-user client/server system which offers consistently rapid response to database access, regardless of database size and complexity.

Art Unit: 2643

Consider claims 40-42, as discussed above, Brockman et al teach the internal architecture of the monitors where the monitors includes processors having RAM memories where the SS7 messages were captured, correlated and processed (see col. 14-15 lines 23+ and Fig. 7). This reads on applicant method wherein said online analytical processing means extracts data from storage in said switched telecommunication network in addition to said common channel signaling and said automatic message accounting equipment to provide said reports. This also reads on applicant method wherein said storage at least in part comprise storage associated with end office switching systems. This further reads on applicant method wherein said extracted data relates to equipment associated with the switching system.

Consider claim 43, Brockman et al teach a system and method for monitoring the operation of the switching nodes. Brockman et al teach the plurality of links connected between the plurality of SSP's (e.g. end office switching systems, tandem switching systems, etc.) and a pair of STP's (see Fig. 1). Brockman et al disclosed that the system monitoring the signaling between two different devices in the network, capture and correlate the signaling information. The system correlate the messages pertaining a particular call or transaction to a single data record. The call transaction records are compiled and direct to the system analyzer in order to evaluate the system performance (see col. 2 lines 7-57). The Call Detail Record (CDR) generation create a data record that can be sent to an external system explaining what occurred in the call. CDR are transmitted to external systems which analyze them for fraud detection, billing, and service assurance applications (see col. 16 lines 30-41). This reads on applicant switching network having

Art Unit: 2643

trunked end office and tandem switching systems controlled by the SS7 common channel signaling system using packet switching via A, B, C, and D links connected to paired signal transfer points connected to one another by C links and connected by A links to end office and tandem switching systems, said network including monitors interfacing to the signaling in said A links and selecting the A link signaling relating to call set up between end office switching system through a tandem switching system; processing means collating said selected signaling by call based at least in part of A link signaling to and from said tandem switching system; processing means processing said collated signaling to create relational files relating to multiple calls; and on line analytical processing means providing a multidimensional database wherein said rational files are information relating to said call set up and tear down are processed to consolidate and summarize successful and unsuccessful attempts to route calls through said tandem switching system and provide reports thereof. Brockman further teaches "every SS7 message contains a routing label consisting of a destination point code (DPC), origination point code (OPC), and the signaling link selection code." (col. 6, ln. 13-33). Brockman also teaches monitor 1 and 2 monitor multiple calling numbers as well as called numbers (there could be many calls going simultaneously between SSP1 and SSP2; col. 9, ln. 5-14). Brockman further teaches "call tracing is applicable only to a small percentage of calls so as not to substantially increase the bandwidth requirements of the communication bus 145 between monitor 1 and 2." (col. 16, ln. 23-29). Based on the messages pertaining the routing label and the ability of monitor 1 and 2 to monitor and trace multiple calling numbers as well as called numbers, it is inherent that Brockman system

Art Unit: 2643

can create relational files relating to multiple transactions for multiple called numbers based upon the collected messages.

Brockman et al failed to disclosed of the automatic messages accounting (AMA) equipment used to provide information to the monitoring system. However, the examiner take official notice that it is well known in the art to used the AMA equipment in a switched network. This reads on applicant network including automatic message accounting equipment output recording call detail of call set up and tear down.

Therefore it would have been obvious to one of the ordinary skill in the art at the time the invention was made to include the AMA system in the switched network in order for billing of service and reporting the event that occurred.

Brockman does not clearly teach performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users, and provide reports thereof.

Malloy teaches performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users; and provide reports thereof (see the abstract; see figure 1; column 2 line 44 to column 3 line 2; column 3 lines 44-61; column 4 lines 50-60; column 5 lines 3-20; column 5 lines 53-64; column 6 lines 10-37; column 10 line 35 to column 11 line 34; column 11 line 55 to column 12 line 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Malloy into the teachings of Brockman in order to

Art Unit: 2643

provide a multi-user client/server system which offers consistently rapid response to database access, regardless of database size and complexity.

Response to Arguments

3. Applicant's arguments filed 4/10/2002 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Brockman system monitors and captures data (e.g., SS7 messages and signals) on all of the connection links. The system then processes the data and produces a plurality of transaction records. It is inherent that the transaction records are stored in a database for future retrieval and manipulating. Malloy discloses a database management system that supports on-line analytical processing (OLAP). It would have been obvious to use a new and improved database management system (i.e., OLAP) in place of an old and outdated database management system (i.e., a conventional database management system) in order to provide a multi-user client/server system which offers consistently rapid response to database access,

Art Unit: 2643

regardless of database size and complexity. Furthermore, OLAP is a well-known "off-the-shelf" database management system. There is a strong presumption that OLAP can be used to process a variety of data types, there exist a strong prima facie case of obviousness and consequent non-patentability under 35 USC 103.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is (703) 308-7527.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Kuntz, can be reached on (703) 305-4708.

Application/Control Number: 09/783,117

Art Unit: 2643

Any response to this final action should be mailed to: Box AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 308-6306 or (703) 308-6296 (Group's Fax numbers) (703) 746-7251 (Examiner's Fax number, only for proposed amendment)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

May 21, 2002

DUC NGUYEN
PRIMARY EXAMINED